

1. AMENDMENT

1.1 IN THE CLAIMS:

1. (Currently Amended) An isolated ~~mammalian p33^{QIK} or p63^{Krs1}~~ peptide of from 16 to ~~about~~ 70 amino acids in length, said peptide comprising ~~the~~ a contiguous amino acid sequence from SEQ ID NO:2, that comprises the sequence of any one of SEQ ID NO:3 through SEQ ID NO:76, wherein said peptide specifically binds to a Krs1 NC antibody.
2. (Currently Amended) The isolated ~~mammalian p33^{QIK} or p63^{Krs1}~~ peptide of claim 1, said peptide comprising a contiguous amino acid sequence from SEQ ID NO:2, that consists ~~consisting essentially of the contiguous amino acid sequence of any one~~ of SEQ ID NO:3 through SEQ ID NO:76.
3. (Currently Amended) ~~An isolated mammalian p33^{QIK} or p63^{Krs1}~~ The isolated peptide of claim 2, said peptide comprising a contiguous amino acid sequence from SEQ ID NO:2, that consists of the sequence of SEQ ID NO:3 ~~from 16 to about 50 amino acids in length, said peptide comprising the contiguous amino acid sequence of any one of SEQ ID NO:3 through SEQ ID NO:55, or any one of SEQ ID NO:58 through SEQ ID NO:76, wherein said peptide specifically binds to a Krs1 NC antibody.~~

4. (Currently Amended) An isolated ~~mammalian p33^{QIK} or p63^{Krs1}~~ peptide of from 16 to ~~70~~about 40 amino acids in length, said peptide comprising ~~the~~ a contiguous amino acid sequence from SEQ ID NO:2, that comprises the sequence of any one of SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:15 through SEQ ID NO:52, SEQ ID NO:58 through SEQ ID NO:67, or SEQ ID NO:74 through SEQ ID NO:76, wherein said peptide specifically binds to a Krs1 NC antibody.
5. (Currently Amended) An isolated ~~mammalian p33^{QIK} or p63^{Krs1}~~ peptide of from 16 to ~~70~~about 30 amino acids in length, said peptide comprising ~~the~~ a contiguous amino acid sequence from SEQ ID NO:2, that comprises the sequence of SEQ ID NO:5~~any one of SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:25 through SEQ ID NO:50, or SEQ ID NO:74 through SEQ ID NO:76, wherein said peptide specifically binds to a Krs1 NC antibody.~~
6. (Canceled)
7. (Currently Amended) ~~The isolated mammalian p33^{QIK} or p63^{Krs1} peptide of claim 1, wherein said peptide comprises the contiguous amino acid~~ An isolated polypeptide comprising the sequence of SEQ ID NO:23, SEQ ID NO:4, or SEQ ID NO:5.
8. (Canceled)

9. (Previously Presented) An isolated peptide consisting of the amino acid sequence of any one of SEQ ID NO:3 through SEQ ID NO:76.

10.-11. (Canceled)

12. (Previously Presented) An isolated polypeptide consisting of the amino acid sequence from position 1 to position 322 of SEQ ID NO:2.

13.-41. (Canceled)

42. (Currently Amended) A composition comprising:

(a) the isolated peptide of claim 9, or

(b) the isolated polypeptide of claim 7; or

(c) the isolated polypeptide of claim 12.

43. (Previously Presented) The composition of claim 42, further comprising at least one pharmaceutically-acceptable excipient.
44. (Previously Presented) The composition of claim 42, further comprising at least one immunostimulant or at least one adjuvant.
45. (Previously Presented) The composition of claim 44, wherein said at least one immunostimulant or said at least one adjuvant is selected from the group consisting of a cytokine, a microsphere, Ribi Adjuvant, saponin, a microfluidized adjuvant, an immune stimulating complex, and an inactivated toxin.
46. (Previously Presented) The composition of claim 42, wherein said composition is formulated for parenteral, intravenous, intraperitoneal, subcutaneous, intranasal, transdermal, or oral administration to an animal.
47. (Previously Presented) The composition of claim 42, further comprising at least one detection reagent.

48. (Previously Presented) The composition of claim 47, wherein said detection reagent comprises a radiolabel, a spin label, or a fluorogenic, chromogenic, or a chemiluminescent label.
49. (Canceled)
50. (Currently Amended) A kit comprising: (a) the isolated peptide of claim 9, or the isolated polypeptide of claim 7 or claim 12; and (b) instructions for using said kit.
51. (Previously Presented) The kit of claim 50, wherein said kit comprises at least one component for performing immunoprecipitation, a dot blot, an ELISA, an RIA, or a Western blot.
52. (Previously Presented) The kit of claim 50, wherein said kit comprises at least one component for immunoprecipitating an antibody or an antigen binding fragment specific for a p33^{QIK} peptide or polypeptide or a p63^{KrsI} peptide or polypeptide from a sample.
- 53.-60. (Canceled)

61. (Previously Presented) The isolated peptide of claim 9, said peptide consisting of the amino acid sequence of SEQ ID NO:3.
62. (Previously Presented) The isolated peptide of claim 9, said peptide consisting of the amino acid sequence of SEQ ID NO:4.
63. (Previously Presented) The isolated peptide of claim 9, said peptide consisting of the amino acid sequence of any one of SEQ ID NO:5 through SEQ ID NO:36.
- 64.-83. (Canceled)